STATE OF MISSOURI
Matt Blunt, Governor • Doyle Childers, Director
DEPARTMENT OF NATURAL RESOURCES
www.dnr.mo.gov

NOV 2 9 2006

CERTIFIED MAIL, 70052570000215846242
RETURN RECEIPT REQUESTED

Mr. Michael L. Menne
Vice President Environmental, Safety and Health
Ameren Services
P.O. Box 66149, MC 602
St. Louis, MO 63166-6149

Re: Ameren Energy Generating Co. – Columbia Energy Center, 019-0105
Part 70 Operating Permit Number: **OP2006-088**
Acid Rain Permit Number: **OP2006-089**

Dear Mr. Menne:

Enclosed with this letter are both your Part 70 operating permit and your Title IV Acid Rain Permit. Please review these documents carefully. Operation of your installation in accordance with the rules and regulations cited in these documents is necessary for continued compliance. It is very important you read and understand the requirements contained in your permits.

If you have any questions or need additional information regarding the permits, please contact the Air Pollution Control Program at (573) 751-4817, or write the Department of Natural Resources' Air Pollution Control Program, PO Box 176, Jefferson City, MO 65102. Thank you for your time.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Michael J. Stansfield, P.E.
Operating Permit Unit Chief

MJS:csk

Enclosures

c: Ms.Tamara Freeman, US EPA Region VII
Ms. Abbie Stockett, Northeast Regional Office
PAMS File: 2002-07-021

Missouri Department of Natural Resources
Air Pollution Control Program

PART 70
PERMIT TO OPERATE

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to operate the air contaminant source(s) described below, in accordance with the laws, rules, and conditions set forth here in.

Operating Permit Number: **OP2006-088**
Expiration Date: NOV 2 8 2011
Installation ID: 019-0105
Project Number: 2002-07-021

Installation Name and Address
Ameren Energy Generating Co. – Columbia Energy Center
4902 Peabody Road
Columbia, MO 65203
Boone County

Parent Company's Name and Address
Ameren Generating Co.
1901 Chouteau Avenue
PO Box 66149
St. Louis, MO 63166-6149

Installation Description:
This installation consists primarily of four simple-cycle, 48-Megawatt (MW) combustion turbine generators, all equipped with dry, low-NO_X burners. The total electrical output capacity is 192 MW, and is used for peaking purposes during periods of high demand. The installation also has four 5.21 MMBtu/hr diesel start-up engines and two 5.77 MMBtu/hr fuel heaters.

NOV 2 9 2006
Effective Date

Director or Designee
Department of Natural Resources

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I. Installation Description and Equipment Listing

INSTALLATION DESCRIPTION

This installation consists primarily of four simple-cycle, 48-Megawatt (MW) combustion turbine generators, all equipped with dry, low-NO_X burners. The total electrical output capacity is 192 MW, and is used for peaking purposes during periods of high demand. The installation also has four 5.21 MMBtu/hr diesel start-up engines and two 5.77 MMBtu/hr fuel heaters.

The installation has only been in operation since 2001, so emissions data is only available for the past four years.

Reported Air Pollutant Emissions, tons per year							
Year	Particulate Matter ≤ Ten Microns (PM-10)	Sulfur Oxides (SO_x)	Nitrogen Oxides (NO_x)	Volatile Organic Compounds (VOC)	Carbon Monoxide (CO)	Lead (Pb)	Hazardous Air Pollutants (HAPs)
2004	1.69	1.10	3.17	1.60	5.46	-	-
2003	2.29	1.28	5.09	2.02	6.85	-	-
2002	2.37	1.32	3.99	2.07	6.60	-	-
2001	1.80	0.06	5.37	0.89	3.04	-	-

EMISSION UNITS WITH LIMITATIONS

The following list provides a description of the equipment at this installation which emits air pollutants and which is identified as having unit-specific emission limitations.

Emission Unit #	Description of Emission Unit
EU0010	Combustion turbine generator #1
EU0020	Combustion turbine generator #2
EU0030	Combustion turbine generator #3
EU0040	Combustion turbine generator #4
EU0050	Diesel start-up engine for combustion turbine generator #1
EU0060	Diesel start-up engine for combustion turbine generator #2
EU0070	Diesel start-up engine for combustion turbine generator #3
EU0080	Diesel start-up engine for combustion turbine generator #4
EU0090	Gas heater for combustion turbine generators #1 and #2
EU0100	Gas heater for combustion turbine generators #3 and #4

EMISSION UNITS WITHOUT LIMITATIONS

The following list provides a description of the equipment which does not have unit specific limitations at the time of permit issuance.

Description of Emission Source
None.

DOCUMENTS INCORPORATED BY REFERENCE
These documents have been incorporated by reference into this permit.

1) Construction permit 012001-025A
2) Current acid rain permit – project 2006-03-018
3) Letter from United States Environmental Protection Agency, Region VII to Ameren Columbia Energy Center dated September 25, 2001, regarding alternative monitoring and testing protocol

II. Plant Wide Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued.

PERMIT CONDITION PW001

10 CSR 10-6.060 Construction Permits Required
Construction Permit # 012001-025A

Emission Limitation:
The permittee shall not discharge into the atmosphere from this installation (ID No. 019-0105) nitrogen oxides (NO_X) in excess of 100.0 tons in any consecutive 12-month period.

Monitoring:
The permittee has installed and calibrated, and shall maintain and operate continuous emissions monitoring systems (CEMS) and record the output of the systems, for measuring NO_X emissions to the atmosphere. These systems were placed in an appropriate location on each turbine's flue gas exhaust such that accurate readings are possible. The output data from the CEMS shall be used in demonstrating compliance with the emission limitation in this permit condition.

Recordkeeping:
1) The permittee shall maintain the monthly and the sum of the most recent consecutive 12-month records of NO_X emissions from the installation. The permittee shall use Attachment A *Monthly NO_X Emission Tracking Record*, or an equivalent form for this purpose.
2) The permittee shall maintain these records for the most recent five years. They must be maintained on-site for two years. They may be kept in either written or electronic form.
3) These records shall be made available immediately for inspection to Department of Natural Resources personnel upon request.

Reporting:
1) The permittee shall report to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102 no later than 30 days after the end of each month in which the record shows that the source exceeded the emission limitation in this permit condition.
2) The permittee shall report any deviations/exceedances of the monitoring, recordkeeping and reporting requirements of this permit condition in the semi-annual monitoring report and annual compliance certification required by Section V of this permit.

III. Emission Unit Specific Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued.

EU0010 THROUGH EU0040 – COMBUSTION TURBINE GENERATORS			
Emission Unit	Description	Manufacturer/Model #	Unit ID
EU0010	48MW Natural Gas Combustion Turbine Generator #1, installed 2001	General Electric/ PG6581(B)	CT-01
EU0020	48MW Natural Gas Combustion Turbine Generator #2, installed 2001	General Electric/ PG6581(B)	CT-02
EU0030	48MW Natural Gas Combustion Turbine Generator #3, installed 2001	General Electric/ PG6581(B)	CT-03
EU0040	48MW Natural Gas Combustion Turbine Generator #3, installed 2001	General Electric/ PG6581(B)	CT-04

PERMIT CONDITION (EU0010 THROUGH EU0040) – 001

10 CSR 10-6.060 Construction Permits Required
Construction Permit # 012001-025A

Operational Limitation:

The permittee shall burn only natural gas in the four combustion turbine generators EU0010 through EU0040.

Monitoring/Recordkeeping/Reporting:

The monitoring, recordkeeping, and reporting requirements for Permit Condition (EU0010 through EU0040)-002 also suffice to demonstrate compliance with this permit condition.

PERMIT CONDITION (EU0010 THROUGH EU0040) – 002

10 CSR 10-6.070 New Source Performance Regulations and
40 CFR Part 60 Subpart A General Provisions and
Subpart GG Standards of Performance for Stationary Gas Turbines

Emission Limitations:

NO_X

1) The permittee shall not cause to be discharged into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides (NO_X) in excess of 0.0091 percent by volume at 15 percent oxygen and on a dry basis. This limitation was derived from the equation in 40 CFR §60.332(a)(1) as follows.

$$STD = 0.0075\left(\frac{14.4}{Y}\right) + F$$

where Y = manufacturer's rated heat rate at manufacturer's rated load (kilojoules per watt hour) =

$$\left(\frac{543.5 MMBtu/hr}{48 MW}\right)\left(\frac{MW}{10^6 W}\right)\left(\frac{10^6 Btu}{MMBtu}\right)\left(\frac{1054.2 joules}{Btu}\right)\left(\frac{kilojoule}{10^3 joules}\right) = 11.9\ kilojoules/W\text{-}hr$$

and F = NO_X emission allowance for fuel-bound nitrogen as defined in 40 CFR 60 §332(a)(4) = 0

Sulfur

2) The permittee shall not shall burn in any stationary gas turbine any fuel which contains total sulfur in excess of 0.8 percent by weight (8000 ppmw).

Monitoring

NO_X

1) These combustion turbine generators were installed after October 3, 1977, but before July 8, 2004, and use water injection to control NO_X emissions. The permittee chose, as an alternative to operating the continuous monitoring system described in paragraph 40 CFR 60 §334(a), to install, certify, maintain, operate, and quality-assure continuous emission monitoring systems (CEMS) to demonstrate compliance with the NO_X emission limitation in this permit condition. [40 CFR 60.334(b)] The installation and certification of the CEMS is complete to the satisfaction of the Environmental Protection Agency (EPA). (See letter from United States EPA, Region VII to Ameren Columbia Energy Center dated September 25, 2001, regarding alternative monitoring and testing protocol.) The permittee shall continue to maintain, operate, and quality assure the CEMS.
2) The permittee need not monitor the nitrogen content of the natural gas burned in these combustion turbine generators.

Sulfur

3) The permittee may elect not to monitor the total sulfur content of the gaseous fuel combusted in the turbine, if the gaseous fuel is demonstrated to meet the definition of natural gas in §60.331(u). [40 CFR 60.334(h)(3)]

Recordkeeping:

NO_X

1) The permittee shall use ISO-corrected NO_X concentration information reported by the CEMS to monitor the NO_X emissions from the combustion turbine generators.
   a) The permittee shall calculate and record an ISO-corrected NO_X emission rate each hour using the equation in 40 CFR 60 §335(b)(1). If CO_2 is used as the diluent, then the NO_X concentration shall be corrected to an O_2 basis using the appropriate equations in 40 CFR Part 60, Appendix A, Reference Method 20, Section 7.
   b) As an alternative to calculating and recording an ISO-corrected NO_X emission rate for each hour, the permittee may perform a "worst case" ISO calculation, using the equation in 40 CFR 60 §335(b)(1) to back calculate an observed NO_X concentration (NO_{Xo}) at which the corresponding ISO corrected NO_X rate (NO_X) would exceed the Subpart GG standard. For the purpose of this calculation, Ameren should substitute the <u>maximum</u> humidity of ambient air (H_o), <u>minimum</u> ambient temperature (T_a), and <u>minimum</u> combustor inlet absolute pressure (P_o) into the ISO adjustment equation.

Sulfur

2) The permittee shall use one of the following sources of information to demonstrate compliance with the emission limitation on fuel sulfur content in this permit condition: {From 40 CFR Part 60 Subpart GG §334(h)(3) and §331(u)]
   a) The gas quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the natural gas burned in these turbines, specifying that the maximum total sulfur content of the fuel is 20.0 grains/100 scf (See Note below) or less; or
   b) Representative fuel sampling data which show that the sulfur content of the gaseous fuel does not exceed 20 grains/100 scf. At a minimum, the amount of fuel sampling data specified in section 2.3.2.4 of Appendix D to 40 CFR Part 75 is required.
      Note: Equivalents of 20.0 grains/100 standard cubic feet in other units are as follows: 0.068 weight percent total sulfur, 680 parts per million by weight (ppmw) total sulfur, and 338 parts per million by volume (ppmv) at 20 degrees Celsius total sulfur
   c) Documentation that the natural gas burned meets the definition of pipeline natural gas in accordance with section 2.3.1.4 of Appendix D of 40 CFR Part 75.

Both NO_X and Sulfur

3) The permittee shall maintain these records for the most recent five years. They must be maintained on-site for two years. They may be kept in either written or electronic form.
4) These records shall be made available immediately for inspection to Department of Natural Resources personnel upon request.

Reporting:

NO_X

1) The permittee shall submit an excess emissions report to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, consistent with the format and schedule described in 40 CFR §60.7(d). For the purpose of excess emission reporting, the permittee shall report:
   a) if option 1)a) in Recordkeeping in this permit condition was chosen, each period during which the ISO-corrected NO_X data exceed the NO_X emission limitation in this permit condition, or
   b) if option 1)b) in Recordkeeping in this permit condition was chosen, any time the "worst case" concentration is exceeded.

   The excess emissions analysis shall be based on 40 CFR Part 75 "bias corrected" NO_X and diluent concentration data, averaged over each 3-hour period (arithmetic average of three contiguous 1-hour periods), but shall exclude any data substituted by the 40 CFR Part 75 "missing data" routines.

Both NO_X and Sulfur

2) The permittee shall report any deviations from the monitoring/recordkeeping requirements of this permit condition in the semi-annual monitoring report and annual compliance certification required by Section V of this permit.

PERMIT CONDITION (EU0010 THROUGH EU0040)-003

10 CSR 10-6.270 Acid Rain Source Permits Required

Emission Limitation:

The permittee shall obtain an Acid Rain Source Permit for the combustion turbine generators EU0010 through EU0040 pursuant to Title IV of the Clean Air Act.

An acid rain permit (Missouri Department of Natural Resources project 2006-03-018, ORIS Code 55447) is being issued to the permittee in conjunction with this Title V permit. Sulfur dioxide (SO_2) limitations are referenced in this Title IV: Phase II Acid Rain Permit for the installation.

Monitoring/Recordkeeping:
The permittee shall retain the most current acid rain permit issued to this installation on-site and shall immediately make such permit available to any Missouri Department of Natural Resources' personnel upon request.

Reporting:
Annual Compliance Certification.
The permittee shall report any deviations of the monitoring/recordkeeping requirements of this permit condition in the semi-annual monitoring report and annual compliance certification required by Section V of this permit.

PERMIT CONDITION (EU0010 THROUGH EU0040) – 004
10 CSR 10-6.350 Emission Limitation and Emissions Trading of Oxides of Nitrogen

Operational Limitations:
1) In order to qualify for the exemption under 10 CSR 10-6.350(1)(B)2, the permittee shall operate each of the four combustion turbine generators EU0010 through EU0040 less than 400 hours per control period averaged over the three most recent years of operation. A control period is defined as a period beginning May 1 of a calendar year and ending on September 30 of the same calendar year.
2) Compliance with this rule shall not relieve the permittee of the responsibility to comply fully with applicable provisions of the Air Conservation Law and rules or any other requirements under local, state or federal law. Specifically, compliance with this rule shall not violate the permit conditions previously established under 10 CSR 10-6.060 or 10 CSR 10-6.065.

Monitoring
The permittee shall install and maintain in proper operating condition a nonresettable engine hour meter on each combustion turbine generator.

Recordkeeping:
1) The permittee shall read the engine hour meter on each combustion turbine generator on a regular basis and record the readings in a log. At a minimum, these readings shall be done on or before May 1 and on or after September 30 of each year. They may be done more often.
2) Each year, the permittee shall calculate from these readings the total time each combustion turbine generator was in operation during the control period or a longer period. The permittee shall also calculate the average of this total for each combustion turbine generator over the three most recent years.
3) The permittee shall maintain these records for the most recent five years. They must be maintained on-site for two years. They may be kept in either written or electronic form.
4) These records shall be made available immediately for inspection to Department of Natural Resources personnel upon request.

Reporting:

1) If the 400-hour operational limitation of this permit condition is exceeded, the exemption shall not apply and the owner or operator must notify the Director of the Air Pollution Control Program within 30 days. If the owner or operator can demonstrate to the Director that the exemption limit was exceeded due to emergency operations or uncontrollable circumstances, the exemption in 10 CSR 10-6.350(1)(B)2 paragraph shall apply.
2) The permittee shall report any deviations/exceedances of the monitoring, recordkeeping and reporting requirements of this permit condition in the semi-annual monitoring report and annual compliance certification required by Section V of this permit.

EU0050 THROUGH EU0080 – DIESEL START-UP ENGINES			
Emission Unit	Description	Manufacturer/Model #	2005 EIQ Reference #
EU0050	5.21 MMBtu/hr diesel start-up engine for combustion turbine generator #1, installed 2001	Detroit Diesel/ 8083-7K50	DE-01
EU0060	5.21 MMBtu/hr diesel start-up engine for combustion turbine generator #2, installed 2001	Detroit Diesel/ 8083-7K50	DE-02
EU0070	5.21 MMBtu/hr diesel start-up engine for combustion turbine generator #3, installed 2001	Detroit Diesel/ 8083-7K50	DE-03
EU0080	5.21 MMBtu/hr diesel start-up engine for combustion turbine generator #4, installed 2001	Detroit Diesel/ 8083-7K50	DE-04

PERMIT CONDITION (EU0050 THROUGH EU0080) – 001

10 CSR 10-6.060 Construction Permits Required
Construction Permit # 012001-025A

Emission Limitations:

The permittee shall not discharge into the atmosphere from the diesel start-up engines EU0050 through EU0080:

1) Particulate matter less than ten microns in diameter (PM_{10}) in excess of 1.62 pounds per engine per hour;
2) PM_{10} in excess of 216 pounds in any consecutive 12-month period; nor
3) Nitrogen oxides (NO_X) in excess of 8.67 tons in any consecutive 12-month period.

Operational Limitation:

If the total operational time of the four diesel start-up engines exceeds 250 minutes in any consecutive 24-hour period, the permittee shall conduct emission testing in order to quantify their PM_{10} emission rate.

Monitoring/Recordkeeping:

1) The permittee shall maintain a daily record of PM_{10} emissions along with a monthly and the sum of the most recent consecutive 12-month records of PM_{10} and NO_X emissions from the diesel start-up engines. The permittee shall use Attachment B *Diesel Engine NO_X and PM_{10} Emissions Tracking*, or an equivalent form, for this purpose.
2) The permittee shall maintain a daily log, in which the length of time each diesel start-up engine operates is recorded. The permittee shall use Attachment C *Diesel Engine Operational Time Tracking*, or an equivalent form, for this purpose.
3) If the operational limitation in this permit condition is exceeded, the permittee shall conduct stack test performance testing for PM_{10} on one of the diesel start-up engines.
   a) A completed Proposed Test Plan form (available on-line at http://www.dnr.mo.gov/forms/index.html#AirPollution) must be submitted to the Air Pollution Control Program 30 days prior to the proposed test date so that the Air Pollution Control Program may arrange a pretest meeting, if necessary, and assure that the test date is acceptable for an observer to be present. The Proposed Test Plan must be approved by the Director prior to conducting the required emission testing.
   b) The testing shall be conducted within 60 days of the exceedance. An alternate schedule for testing may be substituted for this time frame if requested by the permittee and approved by the director.
   c) The stack test shall demonstrate that the PM_{10} emission rate does not exceed 0.31 lb/MMBtu or 1.62 lb/hr.
4) The permittee shall maintain these records for the most recent five years. They must be maintained on-site for two years. They may be kept in either written or electronic form.
5) These records shall be made available immediately for inspection to Department of Natural Resources personnel upon request.

Reporting:

1) The permittee shall report to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102 no later than 30 days after the date on which the record shows that the diesel start-up engines exceeded any of the emission or operational limitations in this permit condition.
2) If stack testing is done on a diesel start-up engine because the operational limitation in this permit condition is exceeded, the permittee shall submit two copies of a written report of the performance test results to the Director of the Air Pollution Control Program within 60 days of completion of the testing. The report must include legible copies of the raw data sheets, analytical instrument laboratory data, and complete sample calculations from the required EPA Method for at least one sample run.
3) The permittee shall report any deviations/exceedances of the monitoring, recordkeeping and reporting requirements of this permit condition in the semi-annual monitoring report and annual compliance certification required by Section V of this permit.

PERMIT CONDITION (EU0050 THROUGH EU0080)-002

10 CSR 10-6.260, Restriction of Emission of Sulfur Compounds

Emission Limitation:

1) Emissions from any existing or new source operation shall not contain more than five hundred parts per million by volume (500 ppmv) of sulfur dioxide.

2) Stack gasses shall not contain more than thirty-five milligrams (35 mg) per cubic meter of sulfuric acid or sulfur trioxide or any combination of those gases averaged on any consecutive three hour time period.
3) No person shall cause or permit the emission of sulfur compounds from any source which causes or contributes to concentrations exceeding those specified in 10 CSR 10-6.010 Ambient Air Quality Standards.

Pollutant	Concentration by Volume	Remarks
Sulfur Dioxide (SO_2)	0.03 parts per million (ppm) (80 micrograms per cubic meter ($\mu g/m^3$))	Annual arithmetic mean
	0.14 ppm (365 $\mu g/m^3$)	24-hour average not to be exceeded more than once per year
	0.5 ppm (1300 $\mu g/m^3$)	3-hour average not to be exceeded more than once per year
Hydrogen Sulfide (H_2S)	0.05 ppm (70 $\mu g/m^3$)	½-hour average not to be exceeded over 2 times per year
	0.03 ppm (42 $\mu g/m^3$)	½-hour average not to be exceeded over 2 times in any 5 consecutive days
Sulfuric Acid (H_2SO_4)	10 $\mu g/m^3$	24-hour average not to be exceeded more than once in any 90 consecutive days
	30 $\mu g/m^3$	1-hour average not to be exceeded more than once in any 2 consecutive days

Operational Limitation/Equipment Specification:
These emission units shall be limited to burning diesel fuel oil with a sulfur content of 1.5 percent (%) by weight or less.

Monitoring/Recordkeeping:
1) The permittee shall maintain an accurate record of the sulfur content of fuel as fired in these emission units. Fuel purchase receipts, analyzed samples or certifications that verity the fuel type and sulfur content will be acceptable.
2) The permittee is assumed to be in compliance with this regulation as long as these emission units burns fuel oil with a sulfur content of 1.5 % by weight or less. Calculations demonstrating this are in Attachment D. The permittee shall keep this attachment with this permit.
3) The permittee shall maintain these records for the most recent five years. They must be maintained on-site for two years. They may be kept in either written or electronic form.
4) These records shall be made available immediately to any Missouri Department of Natural Resources' personnel upon request.

Reporting:
Reports of any deviations from monitoring, recordkeeping and reporting requirements of this permit condition shall be submitted semiannually, in the semi-annual monitoring report and annual compliance certification, as required by Section V of this permit.

EU0090 AND EU0100 – GAS HEATERS		
Emission Unit	Description	Unit ID
EU0090	5.77 MMBtu/hr fuel conditioning heater for combustion turbine generators #1 and #2, installed 2001	GH-01
EU0100	5.77 MMBtu/hr fuel conditioning heater for combustion turbine generators #3 and #4, installed 2001	GH-02

PERMIT CONDITION (EU0090 AND EU0100)-001

10 CSR 10-3.060 Maximum Allowable Emission of Particulate Matter from Fuel Burning Equipment Used for Indirect Heating

Emission Limitation:

The permittee shall not emit particulate matter in excess of 0.10 pounds per million BTU of heat input.

Operational/Equipment Limitation:

This emission unit shall be limited to burning natural gas.

Monitoring/Recordkeeping/Reporting:

1) The records required to demonstrate compliance with Permit Condition (EU0090 and EU0100) - 002 also suffice to ensure compliance with this permit condition.
2) The permittee will be in compliance with this regulation as long as these emission units burn natural gas exclusively. Calculations demonstrating this are in Attachment H. The permittee shall keep this attachment with the rest of this permit. No other monitoring, recordkeeping, or reporting is required for this permit condition.

PERMIT CONDITION (EU0090 AND EU0100) – 002

10 CSR 10-6.060 Construction Permits Required
Construction Permit # 012001-025A

Operational Limitation:

1) The permittee shall burn only natural gas in the fuel heaters EU0090 and EU0100.
2) The permittee shall only operate the fuel heaters EU0090 and EU0100 during times of turbine initialization and operation.

Monitoring/Recordkeeping:

1) The permittee shall maintain documentation supporting that all fuel burned in these units is natural gas.
2) The permittee shall maintain these records for the most recent five years. They must be maintained on-site for two years. They may be kept in either written or electronic form.
3) These records shall be made available immediately for inspection to Department of Natural Resources personnel upon request.

Reporting:

The permittee shall report any deviations from the operational limitations and monitoring/recordkeeping requirements of this permit condition in the semi-annual monitoring report and annual compliance certification required by Section V of this permit.

PERMIT CONDITION (EU0090 AND EU0100) – 003

10 CSR 10-6.220 Restriction of Emissions of Visible Air Contaminants

Emission Limitations:

1) No owner or other person shall cause or permit emissions to be discharged into the atmosphere from any source any visible emissions with an opacity greater than 20%.
2) Exception: A person may discharge into the atmosphere from any source of emissions for a period(s) aggregating not more than six (6) minutes in any 60 minutes air contaminants with an opacity up to 60%.

Monitoring:

1) The permittee shall conduct opacity readings on the gas heaters EU0090 and EU0100 using the procedures contained in USEPA Test Method 22. At a minimum, the observer should be trained and knowledgeable about the effects on visibility of emissions caused by background contrast, ambient lighting, observer position relative to lighting, wind and the presence of uncombined water. Readings are only required when the emission unit is operating and when the weather conditions allow. If no visible or other significant emissions are observed using these procedures, then no further observations would be required. For emission units with visible emissions perceived or believed to exceed the applicable opacity standard, the source representative would then conduct a Method 9 observation.
2) The following monitoring schedule must be maintained:
   a) Weekly observations shall be conducted for a minimum of eight consecutive weeks after permit issuance. Should no violation of this regulation be observed during this period then-
   b) Observations must be made once every two weeks for a period of eight weeks. If a violation is noted, monitoring reverts to weekly. Should no violation of this regulation be observed during this period then-
   c) Observations must be made semi-annually. If a violation is noted, monitoring reverts to weekly.
3) If the source reverts to weekly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring frequency. If the source has already performed the weekly and biweekly monitoring and is doing monitoring in compliance with a previous permit, the weekly and biweekly monitoring do not need to be repeated.

Recordkeeping:

1) The permittee shall maintain records of all observation results (see Attachment E), noting:
   a) Whether any air emissions (except for water vapor) were visible from the emission units,
   b) All emission units from which visible emissions occurred, and
   c) Whether the visible emissions were normal for the process.
2) The permittee shall maintain records of any equipment malfunctions. (see Attachment F)
3) The permittee shall maintain records of any Method 9 test performed in accordance with this permit condition. (see Attachment G)
4) Attachments E, F and G contain logs including these recordkeeping requirements. These logs, or an equivalent created by the permittee, must be used to certify compliance with this requirement.

5) The permittee shall maintain these records for the most recent five years. They must be maintained on-site for two years. They may be kept in either written or electronic form.
6) These records shall be made available immediately to any Missouri Department of Natural Resources' personnel upon request.

Reporting:

1) The permittee shall report to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than 30 days after the permittee determined, using the Method 9 test, that either or both of the emission units exceeded the opacity limit.
2) Reports of any deviations from monitoring, recordkeeping and reporting requirements of this permit condition shall be submitted semiannually, in the semi-annual monitoring report and annual compliance certification, as required by Section V of this permit.

PERMIT CONDITION (EU0090 AND EU0100) - 004

10 CSR 10-6.260, Restriction of Emission of Sulfur Compounds

Emission Limitation:

No person shall cause or allow emissions of sulfur dioxide into the atmosphere from any indirect heating source in excess of eight pounds of sulfur dioxide per million BTUs actual heat input averaged on any consecutive three hour time period

Operational/Equipment Limitation:

This emission unit shall be limited to burning natural gas.

Monitoring/Recordkeeping/Reporting:

1) The records required to demonstrate compliance with Permit Condition (EU0090 and EU0100) - 002 also suffice to ensure compliance with this permit condition.
2) The permittee will be in compliance with this regulation as long as these emission units burn natural gas exclusively. Calculations demonstrating this are in Attachment I. The permittee shall keep this attachment with the rest of this permit. No other monitoring, recordkeeping, or reporting is required for this permit condition.

IV. Core Permit Requirements

The installation shall comply with each of the following requirements. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued.

10 CSR 10-6.050 Start-up, Shutdown and Malfunction Conditions

1) In the event of a malfunction, which results in excess emissions that exceed one hour, the permittee shall submit to the director within two business days, in writing, the following information:
   a) Name and location of installation;
   b) Name and telephone number of person responsible for the installation;
   c) Name of the person who first discovered the malfunction and precise time and date that the malfunction was discovered.
   d) Identity of the equipment causing the excess emissions;
   e) Time and duration of the period of excess emissions;
   f) Cause of the excess emissions;
   g) Air pollutants involved;
   h) Best estimate of the magnitude of the excess emissions expressed in the units of the applicable requirement and the operating data and calculations used in estimating the magnitude;
   i) Measures taken to mitigate the extent and duration of the excess emissions; and
   j) Measures taken to remedy the situation that caused the excess emissions and the measures taken or planned to prevent the recurrence of these situations.
2) The permittee shall submit the paragraph 1 information list to the director in writing at least ten days prior to any maintenance, start-up or shutdown, which is expected to cause an excessive release of emissions that exceed one hour. If notice of the event cannot be given ten days prior to the planned occurrence, it shall be given as soon as practicable prior to the release. If an unplanned excess release of emissions exceeding one hour occurs during maintenance, start-up or shutdown, the director shall be notified verbally as soon as practical during normal working hours and no later than the close of business of the following working day. A written notice shall follow within ten working days.
3) Upon receipt of a notice of excess emissions issued by an agency holding a certificate of authority under section 643.140, RSMo, the permittee may provide information showing that the excess emissions were the consequence of a malfunction, start-up or shutdown. The information, at a minimum, should be the paragraph 1 list and shall be submitted not later than 15 days after receipt of the notice of excess emissions. Based upon information submitted by the permittee or any other pertinent information available, the director or the commission shall make a determination whether the excess emissions constitute a malfunction, start-up or shutdown and whether the nature, extent and duration of the excess emissions warrant enforcement action under section 643.080 or 643.151, RSMo.
4) Nothing in this rule shall be construed to limit the authority of the director or commission to take appropriate action, under sections 643.080, 643.090 and 643.151, RSMo to enforce the provisions of the Air Conservation Law and the corresponding rule.
5) Compliance with this rule does not automatically absolve the permittee of liability for the excess emissions reported.

10 CSR 10-6.060 Construction Permits Required

The permittee shall not commence construction, modification, or major modification of any installation subject to this rule, begin operation after that construction, modification, or major modification, or begin operation of any installation which has been shut down longer than five years without first obtaining a permit from the permitting authority.

10 CSR 10-6.065 Operating Permits

The permittee shall file a complete application for renewal of this operating permit at least six months before the date of permit expiration. In no event shall this time be greater than eighteen months. [10 CSR 10-6.065(6)(B)1.A(V)] The permittee shall retain the most current operating permit issued to this installation on-site. [10 CSR 10-6.065(6)(C)1.C(II)] The permittee shall immediately make such permit available to any Missouri Department of Natural Resources personnel upon request. [10 CSR 10-6.065(6)(C)3.B]

10 CSR 10-6.110 Submission of Emission Data, Emission Fees and Process Information

1) The permittee shall complete and submit an Emission Inventory Questionnaire (EIQ) in accordance with the requirements outlined in this rule.
2) The permittee shall pay an annual emission fee per ton of regulated air pollutant emitted according to the schedule in the rule. This fee is an emission fee assessed under authority of RSMo. 643.079 to satisfy the requirements of the Federal Clean Air Act, Title V.
3) The fees shall be due April 1 each year for emissions produced during the previous calendar year. The fees shall be payable to the Department of Natural Resources and shall be accompanied by the Emissions Inventory Questionnaire (EIQ) form or equivalent approved by the director.

10 CSR 10-6.130 Controlling Emissions During Episodes of High Air Pollution Potential

This rule specifies the conditions that establish an air pollution alert (yellow/orange/red/purple), or emergency (maroon) and the associated procedures and emission reduction objectives for dealing with each. The permittee shall submit an appropriate emergency plan if required by the Director.

10 CSR 10-6.150 Circumvention

The permittee shall not cause or permit the installation or use of any device or any other means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission or air contaminant which violates a rule of the Missouri Air Conservation Commission.

10 CSR 10-6.170 Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin

1) The permittee shall not cause or allow to occur any handling, transporting or storing of any material; construction, repair, cleaning or demolition of a building or its appurtenances; construction or use of a road, driveway or open area; or operation of a commercial or industrial installation without applying reasonable measures as may be required to prevent, or in a manner which allows or may allow, fugitive particulate matter emissions to go beyond the premises of origin in quantities that the particulate matter may be found on surfaces beyond the property line of origin. The nature or origin of the particulate matter shall be determined to a reasonable degree of certainty by a technique proven to be accurate and approved by the director.
2) The permittee shall not cause nor allow to occur any fugitive particulate matter emissions to remain visible in the ambient air beyond the property line of origin.

3) Should it be determined that noncompliance has occurred, the director may require reasonable control measures as may be necessary. These measures may include, but are not limited to, the following:
   a) Revision of procedures involving construction, repair, cleaning and demolition of buildings and their appurtenances that produce particulate matter emissions;
   b) Paving or frequent cleaning of roads, driveways and parking lots;
   c) Application of dust-free surfaces;
   d) Application of water; and
   e) Planting and maintenance of vegetative ground cover.

10 CSR 10-6.180 Measurement of Emissions of Air Contaminants

1) The director may require any person responsible for the source of emission of air contaminants to make or have made tests to determine the quantity or nature, or both, of emission of air contaminants from the source. The director may specify testing methods to be used in accordance with good professional practice. The director may observe the testing. All tests shall be performed by qualified personnel.
2) The director may conduct tests of emissions of air contaminants from any source. Upon request of the director, the person responsible for the source to be tested shall provide necessary ports in stacks or ducts and other safe and proper sampling and testing facilities, exclusive of instruments and sensing devices as may be necessary for proper determination of the emission of air contaminants.
3) The director shall be given a copy of the test results in writing and signed by the person responsible for the tests.

10 CSR 10-3.030 Open Burning Restrictions

1) The permittee shall not conduct, cause, permit or allow a salvage operation, the disposal of trade wastes or burning of refuse by open burning.
2) Exception - Open burning of trade waste or vegetation may be permitted only when it can be shown that open burning is the only feasible method of disposal or an emergency exists which requires open burning.
3) Any person intending to engage in open burning shall file a request to do so with the director. The request shall include the following:
   a) The name, address and telephone number of the person submitting the application; The type of business or activity involved; A description of the proposed equipment and operating practices, the type, quantity and composition of trade wastes and expected composition and amount of air contaminants to be released to the atmosphere where known;
   b) The schedule of burning operations;
   c) The exact location where open burning will be used to dispose of the trade wastes;
   d) Reasons why no method other than open burning is feasible; and
   e) Evidence that the proposed open burning has been approved by the fire control authority which has jurisdiction.
4) Upon approval of the open burning permit application by the director, the person may proceed with the operation under the terms of the open burning permit. Be aware that such approval shall not exempt Ameren Energy Generating Co. - Columbia Energy Center from the provisions of any other law, ordinance or regulation.
5) The permittee shall maintain files with letters from the director approving the open burning operation and previous DNR inspection reports.

10 CSR 10-3.090 Restriction of Emission of Odors

No person may cause, permit or allow the emission of odorous matter in concentrations and frequencies or for durations that odor can be perceived when one volume of odorous air is diluted with seven volumes of odor-free air for two separate trials not less than 15 minutes apart within the period of one hour. **This requirement is not federally enforceable.**

Title VI – 40 CFR Part 82 Protection of Stratospheric Ozone

1) The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
   a) All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to §82.106.
   b) The placement of the required warning statement must comply with the requirements pursuant to §82.108.
   c) The form of the label bearing the required warning statement must comply with the requirements pursuant to §82.110.
   d) No person may modify, remove, or interfere with the required warning statement except as described in §82.112.
2) The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners (MVACs) in Subpart B:
   a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.
   b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.
   c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.
   d) Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with recordkeeping requirements pursuant to §82.166. ("MVAC-like" appliance as defined at §82.152).
   e) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to §82.156.
   f) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.
3) If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.
4) If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant.

The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. *Federal Only - 40 CFR part 82*

10 CSR 10-6.280 Compliance Monitoring Usage

1) The permittee is not prohibited from using the following in addition to any specified compliance methods for the purpose of submission of compliance certificates:
   a) Monitoring methods outlined in 40 CFR Part 64;
   b) Monitoring method(s) approved for the permittee pursuant to 10 CSR 10-6.065, "Operating Permits", and incorporated into an operating permit; and
   c) Any other monitoring methods approved by the director.
2) Any credible evidence may be used for the purpose of establishing whether a permittee has violated or is in violation of any such plan or other applicable requirement. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred by a permittee:
   a) Monitoring methods outlined in 40 CFR Part 64;
   b) A monitoring method approved for the permittee pursuant to 10 CSR 10-6.065, "Operating Permits", and incorporated into an operating permit; and
   c) Compliance test methods specified in the rule cited as the authority for the emission limitations.
3) The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:
   a) Applicable monitoring or testing methods, cited in:
      i) 10 CSR 10-6.030, "Sampling Methods for Air Pollution Sources";
      ii) 10 CSR 10-6.040, "Reference Methods";
      iii) 10 CSR 10-6.070, "New Source Performance Standards";
      iv) 10 CSR 10-6.080, "Emission Standards for Hazardous Air Pollutants"; or
   b) Other testing, monitoring, or information gathering methods, if approved by the director, that produce information comparable to that produced by any method listed above.

V. General Permit Requirements

The installation shall comply with each of the following requirements. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued,

10 CSR 10-6.065(6)(C)1.B Permit Duration

This permit is issued for a term of five years, commencing on the date of issuance. This permit will expire at the end of this period unless renewed.

10 CSR 10-6.065(6)(C)1.C General Recordkeeping and Reporting Requirements

1) Recordkeeping
   a) All required monitoring data and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report or application.
   b) Copies of all current operating and construction permits issued to this installation shall be kept on-site for as long as the permits are in effect. Copies of these permits shall be made immediately available to any Missouri Department of Natural Resources' personnel upon request.
2) Reporting
   a) All reports shall be submitted to the Air Pollution Control Program, Enforcement Section, P. O. Box 176, Jefferson City, MO 65102.
   b) The permittee shall submit a report of all required monitoring by:
      i) October 1st for monitoring which covers the January through June time period, and
      ii) April 1st for monitoring which covers the July through December time period.
      iii) Exception. Monitoring requirements which require reporting more frequently than semi annually shall report no later than 30 days after the end of the calendar quarter in which the measurements were taken.
   c) Each report shall identify any deviations from emission limitations, monitoring, recordkeeping, reporting, or any other requirements of the permit, this includes deviations or Part 64 exceedances.
   d) Submit supplemental reports as required or as needed. Supplemental reports are required no later than 30 days after any exceedance of any applicable rule, regulation or other restriction. All reports of deviations shall identify the cause or probable cause of the deviations and any corrective actions or preventative measures taken.
      i) Notice of any deviation resulting from an emergency (or upset) condition as defined in paragraph (6)(C)7.A of 10 CSR 10-6.065 (Emergency Provisions) shall be submitted to the permitting authority either verbally or in writing within two working days after the date on which the emission limitation is exceeded due to the emergency, if the permittee wishes to assert an affirmative defense. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that indicate an emergency occurred and the permittee can identify the cause(s) of the emergency. The permitted installation must show that it was operated properly at the time and that during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or requirements in the permit. The notice must contain a description of the emergency, the steps taken to mitigate emissions, and the corrective actions taken.
      ii) Any deviation that poses an imminent and substantial danger to public health, safety or the environment shall be reported as soon as practicable.

iii) Any other deviations identified in the permit as requiring more frequent reporting than the permittee's semiannual report shall be reported on the schedule specified in this permit, and no later than 30 days after any exceedance of any applicable rule, regulation, or other restriction.

e) Every report submitted shall be certified by the responsible official, except that, if a report of a deviation must be submitted within ten days after the deviation, the report may be submitted without a certification if the report is resubmitted with an appropriate certification within ten days after that, together with any corrected or supplemental information required concerning the deviation.

f) The permittee may request confidential treatment of information submitted in any report of deviation.

10 CSR 10-6.065(6)(C)1.D Risk Management Plan Under Section 112(r)

The permittee shall comply with the requirements of 40 CFR Part 68, Accidental Release Prevention Requirements. If the permittee has more than a threshold quantity of a regulated substance in process, as determined by 40 CFR Section 68.115, the permittee shall submit a Risk Management Plan in accordance with 40 CFR Part 68 no later than the latest of the following dates:

1) June 21, 1999;
2) Three years after the date on which a regulated substance is first listed under 40 CFR Section 68.130; or
3) The date on which a regulated substance is first present above a threshold quantity in a process.

10 CSR 10-6.065(6)(C)1.E Title IV Allowances

This permit prohibits emissions which exceed any allowances the installation holds under Title IV of the Clean Air Act.

No permit revisions shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid rain program if the increases do not require a permit revision under any other applicable requirement.

Limits cannot be placed on the number of allowances that may be held by an installation. The installation may not use these allowances, however, as a defense for noncompliance with any other applicable requirement.

Any allowances held by a Title IV installation shall be accounted for according to procedures established in rules promulgated under Title IV of the Clean Air Act.

A Title IV acid rain permit is being issued in conjunction with this Title V Part 70 operating permit..

10 CSR 10-6.065(6)(C)1.F Severability Clause

In the event of a successful challenge to any part of this permit, all uncontested permit conditions shall continue to be in force. All terms and conditions of this permit remain in effect pending any administrative or judicial challenge to any portion of the permit. If any provision of this permit is invalidated, the permittee shall comply with all other provisions of the permit.

10 CSR 10-6.065(6)(C)1.G General Requirements

1) The permittee must comply with all of the terms and conditions of this permit. Any noncompliance with a permit condition constitutes a violation and is grounds for enforcement action, permit termination, permit revocation and re-issuance, permit modification or denial of a permit renewal application.
2) The permittee may not use as a defense in an enforcement action that it would have been necessary for the permittee to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit
3) The permit may be modified, revoked, reopened, reissued or terminated for cause. Except as provided for minor permit modifications, the filing of an application or request for a permit modification, revocation and reissuance, or termination, or the filing of a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
4) This permit does not convey any property rights of any sort, nor grant any exclusive privilege.
5) The permittee shall furnish to the Air Pollution Control Program, upon receipt of a written request and within a reasonable time, any information that the Air Pollution Control Program reasonably may require to determine whether cause exists for modifying, reopening, reissuing or revoking the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to the Air Pollution Control Program copies of records required to be kept by the permittee. The permittee may make a claim of confidentiality for any information or records submitted pursuant to 10 CSR 10-6.065(6)(C)1.

10 CSR 10-6.065(6)(C)1.H Incentive Programs Not Requiring Permit Revisions

No permit revision will be required for any installation changes made under any approved economic incentive, marketable permit, emissions trading, or other similar programs or processes provided for in this permit.

10 CSR 10-6.065(6)(C)1.I Reasonably Anticipated Operating Scenarios

None

10 CSR 10-6.065(6)(C)1.J Emissions Trading

As indicated by the letter shown on the following page, all four combustion turbine generators at this installation are exempt from 10 CSR 10-6.350 *Emission Limitations and Emissions Trading of Oxides of Nitrogen*, per paragraph (1)(B)2 of that regulation.

Ameren Services

Environmental, Safety & Health
314.554.3651 (Phone)
314.554.4182 (Facsimile)
schughes@ameren.com

One Ameren Plaza
1901 Chouteau Avenue
PO Box 66149
St. Louis, MO 63166-6149
314.621.3222

February 27, 2004

Ms. Pamela Muren
Operating Permit Unit Chief
Air Pollution Control Program
Missouri Department of Natural Resources
P.O. Box 176
Jefferson City, MO 65102-0176

Ameren

Re: Ameren Energy Generating Company Account Certificate of Representation for NO_x Banking and Trading Rule

Dear Ms. Muren,

In accordance with the requirements of 10 CSR 10-6.350 Emission Limitation and Emissions Trading of Oxides of Nitrogen, Ameren Energy Generating Company is submitting the following list of generating units, indicating which units will be taking exemptions and identifying the NO_x Authorized Account Representative for the units that are not taking an exemption. Currently all Ameren Energy Generating Company units are claiming an exemption.

Ameren Energy Generating Company Units	Status	NO_x Authorized Account Representative
Combustion Turbine Generators		
Columbia Energy Center – Units CT01, CT02, CT03 & CT04	Exempt < 400 hrs	NA

Questions related to this submittal should be directed to Steven Whitworth at (314) 554-4908 or Steven Hughes at (314) 554-3651.

Sincerely,

Michael L. Menne
Vice President, Environmental, Safety and Health

10 CSR 10-6.065(6)(C)3 Compliance Requirements

1) Any document (including reports) required to be submitted under this permit shall contain a certification signed by the responsible official.
2) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized officials of the Missouri Department of Natural Resources, or their authorized agents, to perform the following (subject to the installation's right to seek confidential treatment of information submitted to, or obtained by, the Air Pollution Control Program):
   a) Enter upon the premises where a permitted installation is located or an emissions-related activity is conducted, or where records must be kept under the conditions of this permit;
   b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
   c) Inspect, at reasonable times and using reasonable safety practices, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
   d) As authorized by the Missouri Air Conservation Law, Chapter 643, RSMo or the Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the terms of this permit, and all applicable requirements as outlined in this permit.
3) All progress reports required under an applicable schedule of compliance shall be submitted semiannually (or more frequently if specified in the applicable requirement). These progress reports shall contain the following:
   a) Dates for achieving the activities, milestones or compliance required in the schedule of compliance, and dates when these activities, milestones or compliance were achieved, and
   b) An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measures adopted.
4) The permittee shall submit an annual certification that it is in compliance with all of the federally enforceable terms and conditions contained in this permit, including emissions limitations, standards, or work practices. These certifications shall be submitted annually by April 1st, unless the applicable requirement specifies more frequent submission. These certifications shall be submitted to EPA Region VII, 901 North 5th Street, Kansas City, Kansas 66101, as well as the Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102. All deviations and Part 64 exceedances and excursions must be included in the compliance certifications. The compliance certification shall include the following:
   a) The identification of each term or condition of the permit that is the basis of the certification;
   b) The current compliance status, as shown by monitoring data and other information reasonably available to the installation;
   c) Whether compliance was continuous or intermittent;
   d) The method(s) used for determining the compliance status of the installation, both currently and over the reporting period; and
   e) Such other facts as the Air Pollution Control Program will require in order to determine the compliance status of this installation.

10 CSR 10-6.065(6)(C)6 Permit Shield

1) Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements as of the date that this permit is issued, provided that:
   a) The application requirements are included and specifically identified in this permit, or

b) The permitting authority, in acting on the permit revision or permit application, determines in writing that other requirements, as specifically identified in the permit, are not applicable to the installation, and this permit expressly includes that determination or a concise summary of it.

2) Be aware that there are exceptions to this permit protection. The permit shield does not affect the following:
   a) The provisions of section 303 of the Act or section 643.090, RSMo concerning emergency orders,
   b) Liability for any violation of an applicable requirement which occurred prior to, or was existing at, the time of permit issuance,
   c) The applicable requirements of the acid rain program,
   d) The authority of the Environmental Protection Agency and the Air Pollution Control Program of the Missouri Department of Natural Resources to obtain information, or
   e) Any other permit or extra-permit provisions, terms or conditions expressly excluded from the permit shield provisions.

10 CSR 10-6.065(6)(C)7 Emergency Provisions

1) An emergency or upset as defined in 10 CSR 10-6.065(6)(C)7.A shall constitute an affirmative defense to an enforcement action brought for noncompliance with technology-based emissions limitations. To establish an emergency- or upset-based defense, the permittee must demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence, the following:
   a) That an emergency or upset occurred and that the permittee can identify the source of the emergency or upset,
   b) That the installation was being operated properly,
   c) That the permittee took all reasonable steps to minimize emissions that exceeded technology-based emissions limitations or requirements in this permit, and
   d) That the permittee submitted notice of the emergency to the Air Pollution Control Program within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and any corrective actions taken.
2) Be aware that an emergency or upset shall not include noncompliance caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

10 CSR 10-6.065(6)(C)8 Operational Flexibility

An installation that has been issued a Part 70 operating permit is not required to apply for or obtain a permit revision in order to make any of the changes to the permitted installation described below if the changes are not Title I modifications, the changes do not cause emissions to exceed emissions allowable under the permit, and the changes do not result in the emission of any air contaminant not previously emitted. The permittee shall notify the Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 901 North 5th Street, Kansas City, Kansas 66101, at least seven days in advance of these changes, except as allowed for emergency or upset conditions. Emissions allowable under the permit means a federally enforceable permit term or condition determined at issuance to be required by an applicable requirement that establishes an emissions limit (including a work practice standard) or a federally enforceable emissions cap that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject.

1) Section 502(b)(10) changes. Changes that, under section 502(b)(10) of the Act, contravene an express permit term may be made without a permit revision, except for changes that would violate

applicable requirements of the Act or contravene federally enforceable monitoring (including test methods), recordkeeping, reporting or compliance requirements of the permit.

a) Before making a change under this provision, The permittee shall provide advance written notice to the Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 901 North 5th Street, Kansas City, Kansas 66101, describing the changes to be made, the date on which the change will occur, and any changes in emission and any permit terms and conditions that are affected. The permittee shall maintain a copy of the notice with the permit, and the APCP shall place a copy with the permit in the public file. Written notice shall be provided to the EPA and the APCP as above at least seven days before the change is to be made. If less than seven days notice is provided because of a need to respond more quickly to these unanticipated conditions, the permittee shall provide notice to the EPA and the APCP as soon as possible after learning of the need to make the change.
b) The permit shield shall not apply to these changes.

10 CSR 10-6.065(6)(C)9 Off-Permit Changes

1) Except as noted below, the permittee may make any change in its permitted operations, activities or emissions that is not addressed in, constrained by or prohibited by this permit without obtaining a permit revision. Insignificant activities listed in the application, but not otherwise addressed in or prohibited by this permit, shall not be considered to be constrained by this permit for purposes of the off-permit provisions of this section. Off-permit changes shall be subject to the following requirements and restrictions:
   a) The change must meet all applicable requirements of the Act and may not violate any existing permit term or condition; the permittee may not change a permitted installation without a permit revision if this change is subject to any requirements under Title IV of the Act or is a Title I modification;
   b) The permittee must provide written notice of the change to the Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 901 North 5th Street, Kansas City, Kansas 66101, no later than the next annual emissions report. This notice shall not be required for changes that are insignificant activities under 10 CSR 10-6.065(6)(B)3. This written notice shall describe each change, including the date, any change in emissions, pollutants emitted and any applicable requirement that would apply as a result of the change.
   c) The permittee shall keep a record describing all changes made at the installation that result in emissions of a regulated air pollutant subject to an applicable requirement and the emissions resulting from these changes; and
   d) The permit shield shall not apply to these changes.

10 CSR 10-6.020(2)(R)12 Responsible Official

The application utilized in the preparation of this permit was signed by Michael L. Menne, Manager, Environmental Safety and Health. On September 11, 2006, the Air Pollution Control Program was informed that the following four persons are all now responsible officials:

Dan Cole – Senior Vice President Administration,
Michael L. Menne – Vice President Environmental, Safety & Health,
Jack Scott –Director CTG Fleet, and
Bryan Uhlmansiek – Manager De-Reg CTG Units.

If any of these four persons terminates employment, or is reassigned different duties such that a different person becomes a responsible person to represent and bind the installation in environmental permitting

affairs, the owner or operator of this air contaminant source shall notify the Director of the Air Pollution Control Program of the change. Said notification shall be in writing and shall be submitted within 30 days of the change. The notification shall include the name and title of the new person assigned by the source owner or operator to represent and bind the installation in environmental permitting affairs. All representations, agreement to terms and conditions and covenants made by the former responsible person that were used in the establishment of limiting permit conditions on this permit will continue to be binding on the installation until such time that a revision to this permit is obtained that would change said representations, agreements and covenants.

10 CSR 10-6.065(6)(E)6 Reopening-Permit for Cause

This permit may be reopened for cause if:

1) The Missouri Department of Natural Resources (MDNR) receives notice from the Environmental Protection Agency (EPA) that a petition for disapproval of a permit pursuant to 40 CFR § 70.8(d) has been granted, provided that the reopening may be stayed pending judicial review of that determination,
2) MDNR or EPA determines that the permit contains a material mistake or that inaccurate statements were made which resulted in establishing the emissions limitation standards or other terms of the permit,
3) Additional applicable requirements under the Act become applicable to the installation; however, reopening on this ground is not required if—:
   a) The permit has a remaining term of less than three years;
   b) The effective date of the requirement is later than the date on which the permit is due to expire; or
   c) The additional applicable requirements are implemented in a general permit that is applicable to the installation and the installation receives authorization for coverage under that general permit,
4) The installation is an affected source under the acid rain program and additional requirements (including excess emissions requirements), become applicable to that source, provided that, upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated into the permit; or
5) MDNR or EPA determines that the permit must be reopened and revised to assure compliance with applicable requirements.

10 CSR 10-6.065(6)(E)1.C Statement of Basis

This permit is accompanied by a statement setting forth the legal and factual basis for the draft permit conditions (including references to applicable statutory or regulatory provisions). This Statement of Basis, while referenced by the permit, is not an actual part of the permit.

VI. Attachments

Attachments follow.

ATTACHMENT A
Monthly NO_X Emission Tracking Record

Unit Type	Unit ID	Hours of Operation	Emission Rate (lbs/hr)	Emission (tons)	Row	Notes
Turbines	CT-01	[redacted]	[redacted]		1	Note 1
	CT-02				2	
	CT-03				3	
	CT-04				4	
Diesel Engines	DE-01 – DE-04				5	Note 2
Gas Heaters	GH-01		0.916		6	Note 3
	GH-02		0.916		7	
NO_X Emission Total for This Month					8	Note 4
12-Month NO_X Emission Total From Prior Month's Form					9	Note 5
Monthly NO_X Emission Total From Prior Year's Form					10	Note 6
Current 12-Month NO_X Emission Total					11	Note 7

Note 1: Fill in Row 1 Emission through Row 4 Emission with monthly NO_X emission for turbines from CEMS data.

Note 2: Copy NO_X Emission Total for This Month (Row A, Column F) from this month's *Diesel Engine NO_X and PM_{10} Emission Tracking* (Attachment B) to Row 5 Emission on this form.

Note 3: For Row 6 and Row 7, calculate Emission = Hours of Operation X Emission Rate / 2000.

Note 4: Add Row 1 Emission through Row 7 Emission together and put the sum in Row 8 (NO_X Emission Total for This Month.)

Note 5: Copy Row 11 (Current 12-Month NO_X Emission Total) from prior month's form into Row 9.

Note 6: Copy Row 8 (NO_X Emission Total for This Month) from form for this month in last calendar year into Row 10.

Note 7: Calculate Row 11 (Current 12-Month NO_X Emission Total) = Row 8 + Row 9 – Row 10. As a check, add Row 8 (NO_X Emission Total for This Month) for this month and the eleven prior months together. The figure should be the same. ***It is a violation if the Current 12-Month NO_X Emission Total exceeds 100.0 tons***

ATTACHMENT B
Diesel Engine NO_X and PM_{10} Emission Tracking

Ameren Energy Generating Company – Columbia Energy Center Boone County, S22, T49N, R12W
Project No. 2001-04-055 Installation ID 019-0105 Permit Number 012001-025A

This sheet covers the period from _____(mm/dd/yyyy) to _____(mm/dd/yyyy) Note 1

Column A	Column B	Column C	Column D	Column E	Column F
Date	Operating Time (min) Note 2	PM_{10} Emission Rate (lbs/min) Note 3	NO_X Emission Rate (lbs/min)	PM_{10} Emission (lbs) Note 4	NO_X Emission (tons) Note 5
		0.027	0.383		
		0.027	0.383		
		0.027	0.383		
		0.027	0.383		
		0.027	0.383		
		0.027	0.383		
		0.027	0.383		
		0.027	0.383		
		0.027	0.383		
		0.027	0.383		
		0.027	0.383		
		0.027	0.383		
		0.027	0.383		
		0.027	0.383		
		0.027	0.383		
		0.027	0.383		
Row A: Emission Totals for This Month Note 6					
Row B: 12-Month Emission Totals From Prior Month's Form Note 7					
Row C: Monthly Emission Totals From Prior Year's Form Note 8					
Row D: Current 12-Month Emission Totals Note 9					

Note 1: If the diesel start-up engines were operated on more than sixteen days in a month, use a second page and only fill out the four total rows at the end on the second page.

Note 2: Fill in total operating time of all four diesel start-up engines for the date in this row, from Attachment C.

Note 3: 1.62 lb/hr (from Permit Condition (EU0050 through EU0080) - 001) X hr/60 min = 0.027 lb/min.

Note 4: Column E = Column B X Column C.

Note 5: Column F = Column B X Column D / 2000.

Note 6: Sum PM_{10} Emission (Column E) and NO_X Emission (Column F) for all dates on this month's form and put in Row A. Use the latter for Attachment A, *Monthly NO_X Emission Tracking Record.*

Note 7: Copy the Current 12-Month PM_{10} Emission Total (Row D, Column E) and the Current 12-Month NO_X Emission Total (Row D, Column F) from prior month's form into Row B.

Note 8: Copy PM_{10} Emission Total for This Month (Row A, Column E) and NO_X Emission Total for This Month (Row A, Column F) from form for this month in last calendar year into Row C.

Note 9: Calculate Row D = Row A + Row B – Row C for PM_{10} (Column E) and again for NO_X (Column F.) As a check, add the PM_{10} Emission Total for This Month (Row A, Column E) for this and the eleven prior months, and also add the NO_X Emission Total for This Month (Row A, Column F) for this and the eleven prior months. The respective figures should be the same. ***It is a violation if the Current 12-Month PM_{10} Emission Total (Row D, Column E) exceeds 216 lbs. or if the Current 12-Month NO_X Emission Total (Row D, Column F) exceeds 8.67 tons.***

ATTACHMENT C
Diesel Engine Operational Time Tracking

Ameren Energy Generating Company – Columbia Energy Center Boone County, S22, T49N, R12W
Project No. 2001-04-055 Installation ID 019-0105 Permit Number 012001-025A

This sheet covers the period from ______________(mm/dd/yyyy) to ______________(mm/dd/yyyy)

Date	Diesel Start-up Engine	Time of Operation (min)	Total Time of Operation (min) *	Date	Diesel Start-up Engine	Time of Operation (min)	Total Time of Operation (min) Note 1

Note 1: ***If the Total Time of Operation of the four diesel start-up engines exceeds 250 minutes in any 24 hour period, then stack testing is required.*** (See Permit Condition (EU0050 through EU0080) – 001.)

ATTACHMENT D
10 CSR 10-6.260 Compliance Demonstration

This attachment may be used to demonstrate that EU0050 through EU0080 are always in compliance with 10 CSR 10-6.260, *Restriction of Emission of Sulfur Compounds*, when they are burning fuel with a sulfur content of 1.5% by weight or less.

General Equation

ppmv SO_2 = SO_2 Emission Factor in lb/MMBtu × F Factor in MMBtu/wscf × Conversion Factor for lb/scf to ppm × Conversion Factor for ppmw to ppmv

1) SO_2 emission factor for diesel engines (SCC 2-02-004-02) = 1.01 × % sulfur in lb/MMBtu = 1.01 X 1.5 lb/MMBtu = 1.52 lb/MMBtu (EPA AP-42 Table 3.4-1.) The emission factor for large stationary diesel engines (SCC 2-02-004-01) was used here instead of the emission factor for dual-fuel engines because these engines are run almost exclusively on diesel and this gives a higher emission factor.

2) The F factor is the ratio of gas volume of products of combustion to the heat content of the fuel. For fuel oil the F factor = 1 MMBtu / 10,320 wscf (From Part 60 Appendix A Method 19 Table 19-2)

3) Conversion factor for lb/scf to ppm = ppm / 1.660E-7 lb/scf (From Part 60 Appendix A Method 19 Table 19-1)

4) Conversion factor for ppmw to ppmv = (28.8 / Molecular Weight of SO_2) ppmv / 1 ppmw = (28.8/64) ppmv / ppmw= 0.45 ppmv / ppmw (From AP-42 Appendix A)

Compliance Demonstration

$$ppmv\ SO_2 = \left(1.52\ lb/MMBtu\right)\left(MMBtu/10{,}320\ ft^3\right)\left(ppmw/1.667E^{-7}\ lb/scf\right)\left(0.45\ ppmv/ppmw\right) = 398\ ppmv$$

398 ppmv SO_2 < 500 ppmv SO_2, so these units is always in compliance when burning fuel with a sulfur content of 1.5% by weight or less.

ATTACHMENT E
Method 22 (Outdoor) Observation Log

This recordkeeping sheet or an equivalent form may be used for the recordkeeping requirements of 10 CSR 10-6.220, *Restriction of Emission of Visible Air Contaminants.*

Method 22 Opacity Emission Observations				
Date	Method 22 Test Observer	Visible Emissions? (yes/no)	Normal Emissions? (yes/no)	If visible emissions, was a Method 9 done? (yes/no)

ATTACHMENT F
Inspection/Maintenance/Repair/Malfunction Log

This recordkeeping sheet or an equivalent form may be used to record inspections of equipment, maintenance, repairs and malfunctions.

Inspection/Maintenance/Repair/Malfunction Log		
Date	Emission Unit/Equipment	Activities Performed

ATTACHMENT G
Method 9 Opacity Emissions Observations

This recordkeeping sheet or an equivalent form may be used for the recordkeeping requirements of 10 CSR 10-6.220, *Restriction of Emission of Visible Air Contaminants.*

Method 9 Opacity Emissions Observations	
Company	Observer
Location	Observer Certification Date
Date	Emission Unit
Time	Control Device

Hour	Minute	Seconds				Steam Plume (check if applicable)		Comments
		0	15	30	45	Attached	Detached	
	0							
	1							
	2							
	3							
	4							
	5							
	6							
	7							
	8							
	9							
	10							
	11							
	12							
	13							
	14							
	15							
	16							
	17							
	18							

SUMMARY OF AVERAGE OPACITY				
Set Number	Time		Opacity	
	Start	End	Sum	Average

Readings ranged from _____ to _____ % opacity.

Was the emission unit in compliance at the time of evaluation? _____ _____ _____

YES NO Signature of Observer

ATTACHMENT H

Calculations Demonstrating Compliance with Permit Condition (EU0090 and EU0100)-001

The following calculations demonstrate that gas heaters (EU0090 and EU0100) are always in compliance with 10 CSR 10-3.060, *Maximum Allowable Emission of Particulate Matter From Fuel Burning Equipment Used for Indirect Heating* when they are burning natural gas.

The installation's total heat input Q in millions of Btu per hour is calculated as follows.

$4 \times 545.30 = 2181.20$ MMBtu/hr – Four combustion turbine generators
$4 \times 5.21 = 20.84$ MMBtu/hr –-Four diesel start-up engines
$2 \times 5.77 = 11.54$ MMBtu/hr – Two gas heaters
2213.58 MMBtu/hr

The installation's total heat input is more than 2,000 MMBtu/hr. The heaters were both installed after February 24, 1971, so they are new sources for the purposes of this regulation. Per 10 CSR 10-3.060(5)(A)2., the maximum allowable amount of particulate matter (PM) which may be emitted from such sources is 0.10 lb/MMBtu/hr of heat input.

Table 1.4.2 in the U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*; Volume I, Stationary Point and Area Sources, Fifth Edition, gives the emission factor for total PM for natural gas combustion as 7.6 lb/10^6 ft^3 of natural gas burned. The combined maximum hourly design rate of both gas heaters is 2×5.77 MMBtu/hr = 11.54 MMBtu/hr. The heat content of natural gas is 1050 Btu/ft^3, so their combined potential to emit PM is

$$\left(\frac{7.6 lbPM}{10^6 ft^3 NaturalGas}\right)\left(\frac{ft^3 NaturalGas}{1050 Btu}\right)\left(\frac{10^6 Btu}{MMBtu}\right) = 0.0072 lbPM / MMBtu$$

The amount of particulate matter that EU0090 and EU0100 have the potential to emit (0.0072 lb / MMBtu) is less than 10% of their allowable emission amount (0.10 lb / MMBtu). Therefore, as long as these gas heaters burn natural gas exclusively, they will be in compliance with this regulation.

ATTACHMENT I

Calculations Demonstrating Compliance with Permit Condition (EU0090 and EU0100)-004

The following calculations demonstrate that gas heaters (EU0090 and EU0100) are always in compliance with 10 CSR 10-6.260, *Restriction of Emission of Sulfur Compounds* when they are burning natural gas.

Per 10 CSR 10-6.260(3)(C)2.A., the maximum allowable amount of sulfur dioxide (SO_2) which may be emitted is 8 lb / MMBtu/hr of actual heat input averaged over a three-hour time period.

Table 1.4.2 in the U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*; Volume I, Stationary Point and Area Sources, Fifth Edition, gives the emission factor for total SO_2 for natural gas combustion as 0.6 lb/10^6 ft^3 of natural gas burned. The combined maximum hourly design rate of both gas heaters is 2 × 5.77 MMBtu/hr = 11.54 MMBtu/hr. The heat content of natural gas is 1050 Btu/ft^3, so their combined potential to emit SO_2 is

$$\left(\frac{0.6 lb SO_2}{10^6 ft^3 Natural Gas}\right)\left(\frac{ft^3 Natural Gas}{1050 Btu}\right)\left(\frac{10^6 Btu}{MMBtu}\right) = 0.00057 lb SO_2 / MMBtu$$

The amount of sulfur dioxide that EU0090 and EU0100 have the potential to emit in any time period (0.00057 lb / MMBtu) is less than 1% of their allowable emission amount (8 lb / MMBtu). Therefore, as long as these gas heaters burn natural gas exclusively, they will be in compliance with this regulation.

STATEMENT OF BASIS

Permit Reference Documents

These documents were relied upon in the preparation of the operating permit. Because they are not incorporated by reference, they are not an official part of the operating permit.

1) Part 70 Operating Permit Application, received July 1, 2002;
2) 2004 Emissions Inventory Questionnaire, received on-line March 28, 2005;
3) U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*; Volume I, Stationary Point and Area Sources, Fifth Edition.

Applicable Requirements Included in the Operating Permit but Not in the Application or Previous Operating Permits

In the operating permit application, the installation indicated they were not subject to the following regulation(s). However, in the review of the application, the agency has determined that the installation is subject to the following regulation(s) for the reasons stated.

1) 10 CSR 10-6.180, *Measurement of Emissions of Air Contaminants*
   The Air Pollution Control Program (APCP) is now including this general requirement in the Core Permit Requirements section of all Part 70 permits.

2) 10 CSR 10-6.280, *Compliance Monitoring Usage*
   The Air Pollution Control Program (APCP) is now including this general requirement in the Core Permit Requirements section of all Part 70 permits.

Other Air Regulations Determined Not to Apply to the Operating Permit

The APCP has determined the following requirements to be inapplicable to this installation at this time for the reasons stated.

1) 10 CSR 10-3.070, *Restriction of Particulate Matter from Becoming Airborne*
   This regulation was rescinded September 28, 1990. It was replaced by10 CSR 10-6.170, Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin, which is included in the Core Permit Requirements.

2) 10 CSR 10-3.080, *Restriction of Emissions of Visible Air Contaminants*
   This regulation was rescinded May 30, 2000. It was replaced by 10 CSR 10-6.220, *Restriction of Emissions of Visible Air Contaminants*, which is included as a permit condition for gas heaters EU0090 and EU0100.

3) 10 CSR 10-6.100, *Alternate Emission Limits*
   This regulation does not apply to this installation because it is an ozone attainment area.

4) 10 CSR 10-6.360, *Control of NO_X Emissions From Electric Generating Units and Non-Electric Generating Boilers*
This regulation does not apply to this installation because it is in Boone county. Per §(1)(A), this exempts it.

5) 10 CSR 10-6.400, *Restriction of Emission of Particulate Matter From Industrial Processes*
This regulation does not apply to any emission units at this installation The only materials introduced into the emission units which may cause an emission of particulate matter are their fuels. Per §(2)(A), liquids and gases used solely as fuels and air introduced for the purposes of combustion are excluded from consideration. Therefore the process weight rate for these emission units is zero, and the regulation does not apply.

It could also be shown that all emission units at this installation are exempt for a second reason. Per §(1)(B)11, they are exempt because they have a potential to emit less than one-half (0.5) pounds per hour of particulate matter

The gas heaters EU0090 and EU0100 are not subject to this regulation for a third reason. Per §(1)(B)6, they are exempt because they are indirect heating units.

Construction Permit Revisions
Only two construction permits have been issued for this installation. The first one, 012001-025, was completely superseded by the second one, 012001-025A. This operating permit makes the following revisions to Construction Permit 012001-025A

1) 10 CSR 10-6.220, *Restriction of Emission of Visible Air Contaminants*, is applied only to the gas heaters EU0090 and EU0100. The explanation for this is in the "Other Regulatory Determinations" section of this Statement of Basis.

2) The requirements for compliance with 10 CSR 10-6.070, *New Source Performance Regulations*, and 40 CFR Part 60 Subpart GG, *Standards of Performance for Stationary Gas Turbines*, have been changed. This was partly because of a letter from the United States Environmental Protection Agency, Region VII to Ameren Columbia Energy Center dated September 25, 2001, regarding alternative monitoring and testing protocol, and partly because the regulation was interpreted differently and some calculations were redone.

3) 10 CSR 10-3.050, *Restriction of Emission of Particulate Matter From Industrial Processes*, was rescinded, and its replacement, 10 CSR 10-6.400, does not apply to any units at this installation. The explanation for this is in the "Other Air Regulations Determined Not to Apply to the Operating Permit" section of this Statement of Basis.

4) 10 CSR 10-6.260, *Restriction of Emission of Sulfur Compounds*, was applied to the gas heaters EU0090 and EU0100 as well as to the diesel start-up engines EU0050 through EU0080. The explanation for this is in the "Other Regulatory Determinations" section of this Statement of Basis.

5) The calculations demonstrating that the gas heaters EU0090 and EU0100 are always in compliance with 10 CSR 10-3.060 *Maximum Allowable Emissions of Particulate Matter from Fuel Burning Equipment Used for Indirect Heating*, were redone.

6) The recordkeeping forms were changed slightly. Also, the wording for recordkeeping requirements was changed from "records ... shall be kept on-site for five (5) years" to the newer standard wording "shall maintain these records for the most recent five years. They must be maintained on-site for two years. They may be kept in either written or electronic form."

7) The construction permit required that deviations/exceedances be reported within ten days. The applicant requested 30 days instead, stating that it takes them more than ten days to fully investigate the causes of a deviation and report on it. The regulations require "prompt" reporting, but leave it to the regulatory agency to specify the exact time period. APCP usually specifies ten days, but there is no reason not to extend this to 30 days in this case. This operating permit now specifies 30 days, superseding the ten days specified in the construction permit. The applicant has been requested to submit a construction permit modification to make the matching change to the construction permit.

8) The construction permit specified PM_{10} limits of 1.68 pounds in any consecutive 24-hour period and 350.4 pounds in any consecutive 12-month period. These limits are in error. The correct limits, specified in the application for that construction permit and in Permit Condition (EU0050 through EU0080)-001 of this permit, are 1.62 pounds per engine per hour and 216 pounds in any consecutive 12-month period. The hourly limit is obtained by multiplying the PM_{10} emission factor of 0.31 lb/MMBtu from Table 3.3-1 in U.S. EPA document AP-42 by the fuel input of 5.21 MMBtu/hr for each engine. The annual limit is obtained from the following equation.

$$Limit = (4 engines)\left(\frac{1.62 lb}{engine - hr}\right)\left(\frac{hr}{60 \min}\right)\left(\frac{20 \min}{start}\right)\left(\frac{100 starts}{yr}\right) = \frac{216 lb}{yr}$$

Furthermore, if the engine operating time of 250 minutes in any consecutive 24-hour period is ever exceeded, and the permittee is required to test an engine, the test results should verify that the PM_{10} emission rate is 0.31 lb/MMBtu or 1.62 lb/hr, instead of 0.3080 lb/hr.

The permittee will submit a request to modify the construction permit so it matches this operating permit.

New Source Performance Standards (NSPS) Applicability

40 CFR Part 60 Subpart GG, *Standards of Performance for Stationary Gas Turbines*, applies to the combustion gas turbines EU0010 through EU0040, and has been included in a condition of this permit.

No other NSPS regulations apply.

Maximum Available Control Technology (MACT) Applicability

1) 40 CFR Part 63 Subpart YYYY, *National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines*
This subpart does not apply to this facility because it is not a major source of hazardous air pollutants. Per 40 CFR 63.6085, this exempts it.

2) 40 CFR Part 63 Subpart ZZZZ, *National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines*
This subpart does not apply to this facility because it is not a major source of hazardous air pollutants. Per 40 CFR 63.6585, this exempts it.

3) 40 CFR Part 63 Subpart DDDDD, , *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters*
This subpart does not apply to this facility because it is not a major source of hazardous air pollutants. Per 40 CFR 63.7485, this exempts it.

No other MACT regulations apply.

National Emission Standards for Hazardous Air Pollutants (NESHAP) Applicability
In the permit application and according to APCP records, there was no indication that any Missouri Air Conservation Law, Asbestos Abatement, 643.225 through 643.250; 10 CSR 10-6.080, Emission Standards for Hazardous Air Pollutants, Subpart M, National Standards for Asbestos; and 10 CSR 10-6.250, Asbestos Abatement Projects - Certification, Accreditation, and Business Exemption Requirements apply to this installation. The installation is subject to these regulations if they undertake any projects that deal with or involve any asbestos containing materials. None of the installation's operating projects underway at the time of this review deal with or involve asbestos containing material. Therefore, the above regulations were not cited in the operating permit. If the installation should undertake any construction or demolition projects in the future that deal with or involve any asbestos containing materials, the installation must follow all of the applicable requirements of the above rules related to that specific project.

No other NESHAP regulations apply.

Compliance Assurance Monitoring (CAM) Applicability
40 CFR Part 64, *Compliance Assurance Monitoring (CAM)* applies to each pollutant specific emission unit that meets all of the following criteria:
1) Is subject to an emission limitation or standard,
2) Uses a control device to achieve compliance, and
3) Has pre-control emissions that exceed or are equivalent to the major source threshold.
40 CFR Part 64 is not applicable because none of the pollutant-specific emission units uses a control device to achieve compliance with a relevant standard.

Other Regulatory Determinations

1) 10 CSR 10-6.220, *Restriction of Emissions of Visible Air Contaminants*
This regulation is included as a permit condition for the gas heaters EU0090 and EU0100. The following emission units are not subject to this regulation because, per §(1)(A), it does not apply to internal combustion engines.
Combustion turbine generators EU0010 through EU0040
Diesel start-up engines EU0050 through EU0080
EU0010 through EU0040 are not subject to this regulation for a second reason. Per §(1)(H), they are exempt because they are regulated by 40 CFR Part 60 Subpart GG.

2) 10 CSR 10-6.260, *Restriction of Emissions of Sulfur Compounds*
This regulation is included as a permit condition for diesel start-up engines EU0050 through EU0080.

It does not apply to combustion turbine generators EU0010 through EU0040, because they are subject to 40 CFR Part 60 Subpart GG. Per §(1)(A)1, this exempts them..

This regulation is also included as a permit condition for the gas heaters EU0090 and EU0100.

3) 10 CSR 10-6.060, *Construction Permits Required*, Construction Permit 012002-025A
In Permit Condition (EU0050 through EU0080)-001 of this permit, the first emission limitation is 1.62 pounds PM_{10} per engine per hour. This limit was obtained by multiplying the PM_{10} emission factor of 0.31 lb/MMBtu from Table 3.3-1 in U.S. EPA document AP-42 by the fuel input of 5.21 MMBtu/hr for each engine. No monitoring or recordkeeping is required to demonstrate compliance with this limitation. It is just assumed that the permittee remains in compliance with it, and the 1.62 lb/engine-hr figure is used in Attachment B to compute the total PM_{10} emissions from these engines. This was done because these engines are run so little – an estimated maximum of 100 starts per year for each engine at 20 minutes per start – and the PM_{10} emissions are so small that they do not warrant the effort of monitoring and recordkeeping. However, the engine operating time *is* monitored, and if it ever exceeds 250 minutes in a day, the permittee is required to test an engine to demonstrate that the original assumption of 0.31 lb/MMBtu or 1.62 lb/hr is valid.

Other Regulations Not Cited in the Operating Permit or the Above Statement of Basis
Any regulation which is not specifically listed in either the Operating Permit or in the above Statement of Basis does not appear, based on this review, to be an applicable requirement for this installation for one or more of the following reasons:
1) The specific pollutant regulated by that rule is not emitted by the installation;
2) The installation is not in the source category regulated by that rule;
3) The installation is not in the county or specific area that is regulated under the authority of that rule;
4) The installation does not contain the type of emission unit which is regulated by that rule;
5) The rule is only for administrative purposes.

Should a later determination conclude that the installation is subject to one or more of the regulations cited in this Statement of Basis or other regulations which were not cited, the installation shall determine and demonstrate, to the APCP's satisfaction, the installation's compliance with that regulation(s). If the installation is not in compliance with a regulation which was not previously cited, the installation shall submit to the APCP a schedule for achieving compliance for that regulation(s).

Prepared by:

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